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(71) Applicants and

(72) Inventors: **AN, Heui Tay** [KR/KR]; Geumkang Apt. 2-507, 278-1, Bugok 2-dong, Geumjeong-gu, Busan 609-822 (KR). **LEE, Dong Hwal** [KR/KR]; LG Metrocity 2cha Apt. 133-901, Yongho 1-dong, Nam-gu, Busan 608-890 (KR).

(74) Agent: **BAEG, Seung Jun**; Chungjo Building 301, 33-1 2-ka, Daechang-dong, Jung-gu, Busan 600-102 (KR).

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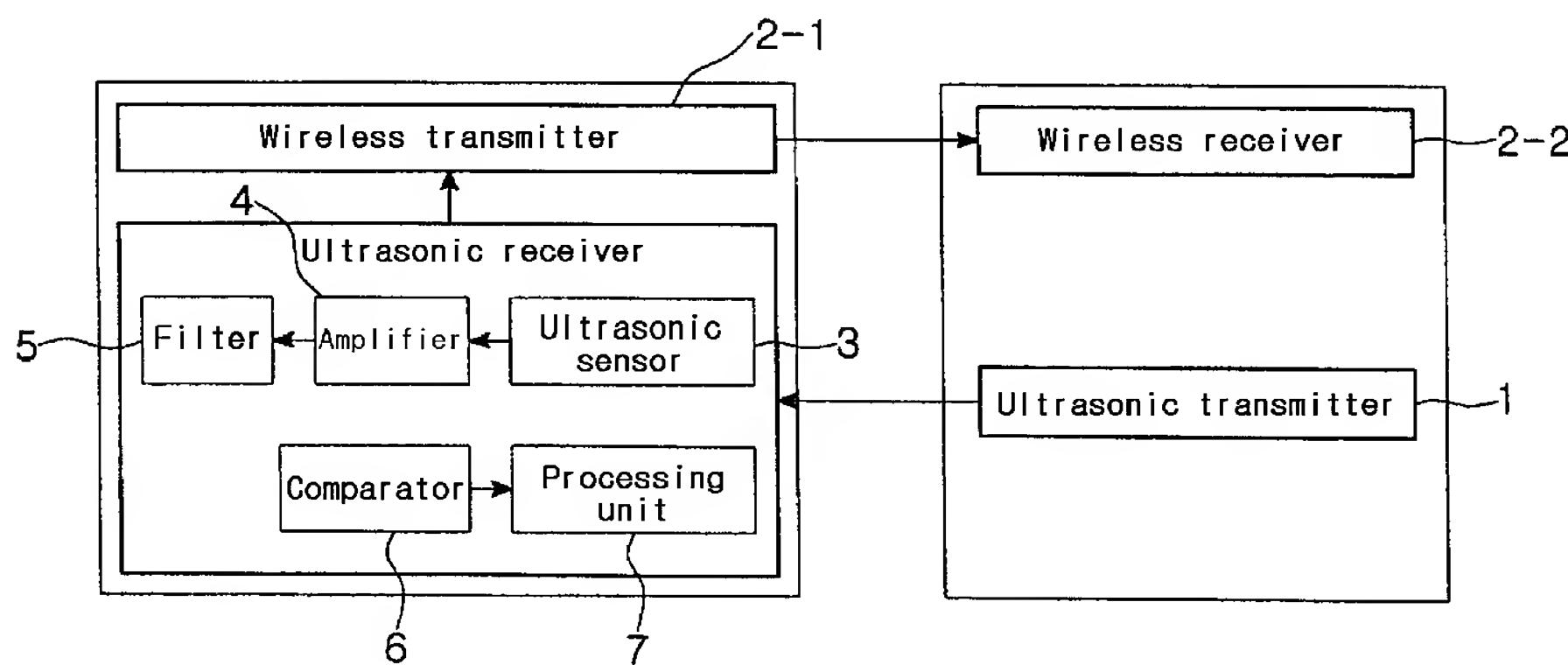
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(54) Title: DISTANCE MEASUREMENT METHOD AND DEVICE USING ULTRASONIC WAVES



(57) **Abstract:** The present invention provides a method of and an apparatus for measuring a distance using an ultrasonic wave. The method comprises steps of receiving through an ultrasonic sensor a signal generated from an ultrasonic transmitter according to a signal of ultrasonic transmission time, amplifying the received signal, filtering a high-frequency wave from the amplified signal, outputting only a signal corresponding to a predetermined signal size from the signal in which the high-frequency wave is filtered, and computing a distance value by calculating the period of the output signal. The apparatus comprises an ultrasonic transmitter for transmitting an ultrasonic wave, a device for transmitting a synchronized signal in a wired or wireless mode in order to an ultrasonic transmission signal, an ultrasonic sensor for receiving the ultrasonic signal transmitted from the ultrasonic transmitter, an amplifier for amplifying the received signal to the ultrasonic sensor, a filter for filtering a high-frequency signal from the amplified signal in the amplifier, a comparator for outputting only a signal corresponding to a predetermined signal size from the filtered signal, and an arithmetic unit for computing a distance value by calculating the period of the output signal.

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